

What is claimed:

1. A computer program product embodied on one or more computer-readable media, the  
2. computer program product adapted for providing an electronic calendar-driven application and  
3. comprising:

4. computer-readable program code means for creating calendar events on an electronic  
5. calendar, the calendar events being organized according to a multi-level hierarchy comprising  
6. context events at an upper level of the hierarchy and specific events at a lower level of the  
7. hierarchy, wherein zero or more specific events may be scheduled on the electronic calendar  
8. during any particular context event; and

9. computer-readable program code means for interrogating the calendar events created for a  
10. user to provide information about the user.

11. 2. The computer program product according to Claim 1, further comprising computer-  
12. readable program code means for automatically applying a default context during calendar periods  
13. when no other context event is active.

14. 3. The computer program product according to Claim 1, further comprising:  
15. computer-readable program code means for detecting an incoming electronic mail  
16. message for the user; and  
17. wherein the computer-readable program code means for interrogating further comprises:  
18. computer-readable program code means for determining whether the user's calendar  
19. indicates that he is currently available for checking his electronic mail, and if not, generating an

7 automated response informing a sender of the electronic mail message of the user's current status  
8 using a currently-active context event for the user and, for particular context events, any  
9 currently-active specific event for the user.

1 4. The computer program product according to Claim 3, wherein the automated response  
2 further comprises information regarding when the user is next available.

1 5. The computer program product according to Claim 1, further comprising:  
2 computer-readable program code means for detecting an incoming instant message or  
3 request for instant messaging status for the user; and  
4 wherein the computer-readable program code means for interrogating further comprises:  
5 computer-readable program code means for determining whether the user's calendar  
6 indicates that he is currently available for instant messaging, and if not, generating an automated  
7 response informing a sender of the instant message or requester of the instant messaging status of  
8 the user's current status using a currently-active context event for the user and, for particular  
9 context events, any currently-active specific event for the user.

1 6. The computer program product according to Claim 5, wherein the automated response  
2 further comprises information regarding when the user is next available.

1 7. The computer program product according to Claim 1, further comprising:  
2 computer-readable program code means for detecting an incoming voice call for the user;

3 and

4 wherein the computer-readable program code means for interrogating further comprises:

5 computer-readable program code means for generating, if the user does not answer the

6 incoming voice call, an automated response informing a caller making the incoming voice call of

7 the user's current status using a currently-active context event for the user and, for particular

8 context events, any currently-active specific event for the user.

8. The computer program product according to Claim 7, wherein the automated response further comprises information regarding when the user is next available.

9. The computer program product according to Claim 1, further comprising:

computer-readable program code means for receiving a request for project management information; and

wherein the computer-readable program code means for interrogating interrogates the calendar events created for a plurality of users to provide information about the context events and specific events scheduled for the users at a target date and a target time period, and further comprising:

computer-readable program code means for generating a response informing a requester of the project management information of the information for the users at the target date and the target time period using a result of the computer-readable program code means for interrogating.

10. The computer program product according to Claim 9, wherein the request asks whether

2 any team member is available at a particular location during a particular time period on a  
3 particular date.

1 11. The computer program product according to Claim 1, wherein zero or more attribute  
2 values may be specified for each of the context events and each of the specific events.

1 12. The computer program product according to Claim 11, wherein the computer-readable  
2 program code means for interrogating further comprises computer-readable program code means  
3 for interrogating the specified attributes of a context event and of any specific event that are  
4 applicable to a target date and a target time or target time period.

5 13. The computer program product according to Claim 1, wherein zero or more attribute  
6 values may be specified for each of the context events and each of the specific events and further  
7 comprising:

8 computer-readable program code means for detecting an incoming electronic mail  
9 message for the user; and

10 wherein the computer-readable program code means for interrogating further comprises:

11 computer-readable program code means for determining whether the user's calendar  
12 indicates that he is currently available for checking his electronic mail, and if not, generating an  
13 automated response informing a sender of the electronic mail of the user's current status using a  
14 currently-active context event for the user, the specified attributes of the currently-applicable  
15 context event, any currently-active specific event for the user, and the specified attributes of any

12 currently-applicable specific event.

1 14. The computer program product according to Claim 13, wherein overrides may be  
2 specified for the attribute values and wherein the computer-readable program code means for  
3 interrogating further comprises computer-readable program code means for applying the  
4 overrides to the attribute values.

1 15. The computer program product according to Claim 1, wherein zero or more attribute  
2 values may be specified for each of the context events and each of the specific events and further  
3 comprising:

computer-readable program code means for detecting an incoming instant message or  
request for instant messaging status for the user; and

wherein the computer-readable program code means for interrogating further comprises:

computer-readable program code means for determining whether the user's calendar  
indicates that he is currently available for instant messaging, and if not, generating an automated  
response informing a sender of the instant message or requester of the instant messaging status of  
the user's current status using a currently-active context event for the user, the specified attributes  
of the currently-applicable context event, any currently-active specific event for the user, and the  
specified attributes of any currently-applicable specific event.

1 16. The computer program product according to Claim 15, wherein overrides may be  
2 specified for the attribute values and wherein the computer-readable program code means for

3 interrogating further comprises applying the overrides to the attribute values.

1 17. The computer program product according to Claim 1, wherein zero or more attribute  
2 values may be specified for each of the context events and each of the specific events and further  
3 comprising:

4 computer-readable program code means for detecting an incoming voice call for the user;  
5 and

6 wherein the computer-readable program code means for interrogating further comprises:

7 computer-readable program code means for generating, if the user does not answer the  
8 incoming voice call, an automated response informing a caller making the incoming voice call of  
9 the user's current status using a currently-active context event for the user, the specified attributes  
10 of the currently-applicable context event, any currently-active specific event for the user, and the  
11 specified attributes of any currently-applicable specific event.

18. The computer program product according to Claim 17, wherein overrides may be  
19 specified for the attribute values and wherein the computer-readable program code means for  
20 interrogating further comprises applying the overrides to the attribute values.

1 19. The computer program product according to Claim 1, wherein zero or more attribute  
2 values may be specified for each of the context events and each of the specific events and further  
3 comprising:

4 computer-readable program code means for receiving a request for project management

5 information for a target date and a target time period; and  
6 wherein the computer-readable program code means for interrogating interrogates the  
7 calendar events created for a plurality of users to provide information about the context events  
8 and specific events scheduled for the users at the target date and the target time period, the  
9 specified attributes of scheduled context events, and the specified attributes of any scheduled  
10 specific events, and further comprising:

11 computer-readable program code means for generating a response informing a requester  
12 of the project management information of the information for the users using a result of the  
13 computer-readable program code means for interrogating.

20. The computer program product according to Claim 19, wherein overrides may be  
specified for the attribute values and wherein the computer-readable program code means for  
interrogating further comprises applying the overrides to the attribute values.

21. The computer program product according to Claim 1, wherein default attribute values  
may be specified for context event types and for specific event types, and wherein a particular  
3 context event and/or a particular specific event may include attribute values which override the  
4 default attribute values.

1 22. The computer program product according to Claim 11, wherein the attribute values  
2 include information on how to immediately contact the user.

1 23. The computer program product according to Claim 11, wherein the attribute values  
2 include whether, and how often, the user checks electronic mail messages.

1 24. The computer program product according to Claim 11, wherein the attribute values  
2 include whether the user is available for instant messaging.

1 25. The computer program product according to Claim 11, wherein the attribute values  
2 include whether, and how often, the user checks voice mail messages.

26. A system for providing an electronic calendar-driven application, comprising:  
means for creating calendar events on an electronic calendar, the calendar events being  
organized according to a multi-level hierarchy comprising context events at an upper level of the  
hierarchy and specific events at a lower level of the hierarchy, wherein zero or more specific  
events may be scheduled on the electronic calendar during any particular context event; and  
means for interrogating the calendar events created for a user to provide information  
about the user at a point in time or for a period of time.

1 27. The system according to Claim 26, further comprising means for automatically applying a  
2 default context during calendar periods when no other context event is active.

1 28. The system according to Claim 26, further comprising  
2 means for detecting an incoming electronic mail message for the user; and

3                   wherein the means for interrogating further comprises:  
4                   means for determining whether the user's calendar indicates that he is currently available  
5                   for checking his electronic mail, and if not, generating an automated response informing a sender  
6                   of the electronic mail message of the user's current status using a currently-active context event  
7                   for the user and, for particular context events, any currently-active specific event for the user.

1       29.   The system according to Claim 26, further comprising:  
2                   means for detecting an incoming voice call for the user; and  
3                   wherein the means for interrogating further comprises:  
4                   means for generating, if the user does not answer the incoming voice call, an automated  
5                   response informing a caller making the incoming voice call of the user's current status using a  
6                   currently-active context event for the user and, for particular context events, any currently-active  
7                   specific event for the user.

1       30.   The system according to Claim 26, further comprising:  
2                   means for receiving a request for project management information; and  
3                   wherein the means for interrogating interrogates the calendar events created for a plurality  
4                   of users to provide information about the context events and specific events scheduled for the  
5                   users at a target date and a target time period, and further comprising:  
6                   means for generating a response informing a requester of the project management  
7                   information of the information for the users at the target date and the target time period using a  
8                   result of the means for interrogating.

1       31. The system according to Claim 30, wherein the request asks whether any team member is  
2       available at a particular location during a particular time period on a particular date.

1       32. The system according to Claim 26, wherein zero or more attribute values may be specified  
2       for each of the context events and each of the specific events.

1       33. The system according to Claim 32, wherein the means for interrogating further comprises  
2       means for interrogating the specified attributes of a context event and of any specific event that  
3       are applicable to a target date and a target time or target time period.

4       34. The system according to Claim 26, wherein zero or more attribute values may be specified  
5       for each of the context events and each of the specific events and further comprising:

6               means for detecting an incoming electronic mail message or an instant message for the  
7       user; and

8               wherein the means for interrogating further comprises:

9               means for determining whether the user's calendar indicates that he is currently available  
10       for checking his electronic mail or available for instant messaging, and if not, generating an  
11       automated response informing a sender of the electronic mail message or the instant message of  
      the user's current status using a currently-active context event for the user, the specified attributes  
      of the currently-applicable context event, any currently-active specific event for the user, and the  
      specified attributes of any currently-applicable specific event.

1       35. The system according to Claim 26, wherein zero or more attribute values may be specified  
2       for each of the context events and each of the specific events and further comprising:  
3               means for detecting an incoming voice call for the user; and  
4               wherein the means for interrogating further comprises:  
5               means for generating, if the user does not answer the incoming voice call, an automated  
6       response informing a caller making the incoming voice call of the user's current status using a  
7       currently-active context event for the user, the specified attributes of the currently-applicable  
8       context event, any currently-active specific event for the user, and the specified attributes of any  
9       currently-applicable specific event.

1       36. The system according to Claim 26, wherein zero or more attribute values may be specified  
2       for each of the context events and each of the specific events and further comprising:

3               means for receiving a request for project management information for a target date and a  
4       target time period; and

5               wherein the means for interrogating interrogates the calendar events created for a plurality  
6       of users to provide information about the context events and specific events scheduled for the  
7       users at the target date and the target time period, the specified attributes of currently-applicable  
8       context events, and the specified attributes of any currently-applicable specific events, and further  
9       comprising:

10               means for generating a response informing a requester of the project management  
11       information of the information for the users using a result of the means for interrogating.

1       37. The system according to Claim 26, wherein default attribute values may be specified for  
2       context event types and for specific event types, and wherein a particular context event and/or a  
3       particular specific event may include attribute values which override the default attribute values.

1       38. The system according to Claim 32, wherein the attribute values include information on  
2       how to immediately contact the user.

1       39. The system according to Claim 32, wherein the attribute values include whether, and how  
0       often, the user checks electronic mail messages

1       40. The system according to Claim 32, wherein the attribute values include whether, and how  
0       often, the user checks voice mail messages.

1       41. A method for providing an electronic calendar-driven application, comprising the steps of:  
2               creating calendar events on an electronic calendar, the calendar events being organized  
3       according to a multi-level hierarchy comprising context events at an upper level of the hierarchy  
4       and specific events at a lower level of the hierarchy, wherein zero or more specific events may be  
5       scheduled on the electronic calendar during any particular context event; and  
6               interrogating the calendar events created for a user to provide information about the user.

1       42. The method according to Claim 41, further comprising the step of automatically applying

2 a default context during calendar periods when no other context event is active.

1 43. The method according to Claim 41, further comprising the step of:  
2       detecting an incoming electronic mail message or an instant message for the user; and  
3       wherein the interrogating step further comprises the step of:  
4           determining whether the user's calendar indicates that he is currently available for  
5        checking his electronic mail or available for instant messaging, and if not, generating an  
6        automated response informing a sender of the electronic mail message or the instant message of  
7        the user's current status using a currently-active context event for the user and, for particular  
context events, any currently-active specific event for the user.

1 44. The method according to Claim 41, further comprising the step of:  
2       detecting an incoming voice call for the user; and  
3       wherein the interrogating step further comprises the steps of:  
4           generating, if the user does not answer the incoming voice call, an automated response  
5        informing a caller making the incoming voice call of the user's current status using a currently-  
6       active context event for the user and, for particular context events, any currently-active specific  
7       event for the user.

1 45. The method according to Claim 41, further comprising the step of:  
2       receiving a request for project management information; and  
3       wherein the interrogating step interrogates the calendar events created for a plurality of

4 users to provide information about the context events and specific events scheduled for the users  
5 at a target date and a target time period, and further comprising the step of:  
6 generating a response informing a requester of the project management information of the  
7 information for the users at the target date and the target time period using a result of the  
8 interrogating step.

1 46. The method according to Claim 45, wherein the request asks whether any team member is  
2 available at a particular location during a particular time period on a particular date.

3 47. The method according to Claim 41, wherein zero or more attribute values may be  
4 specified for each of the context events and each of the specific events.

5 48. The method according to Claim 47, wherein the interrogating step further comprises  
6 interrogating the specified attributes of a context event and of any specific event that are  
7 applicable to a target date and a target time or target time period.

8 49. The method according to Claim 41, wherein zero or more attribute values may be  
9 specified for each of the context events and each of the specific events and further comprising the  
10 step of:

11 detecting an incoming electronic mail message for the user; and  
12 wherein the interrogating step further comprises the steps of:  
13 determining whether the user's calendar indicates that he is currently available for

7 checking his electronic mail, and if not, generating an automated response informing a sender of  
8 the electronic mail message of the user's current status using a currently-active context event for  
9 the user, the specified attributes of the currently-applicable context event, any currently-active  
10 specific event for the user, and the specified attributes of any currently-applicable specific event.

1 50. The method according to Claim 41, wherein zero or more attribute values may be  
2 specified for each of the context events and each of the specific events and further comprising the  
3 step of:

4 detecting an incoming voice call for the user; and  
5 wherein the interrogating step further comprises the step of:  
6 generating, if the user does not answer the incoming voice call, an automated response  
7 informing a caller making the incoming voice call of the user's current status using a currently-  
8 active context event for the user, the specified attributes of the currently-applicable context event,  
9 any currently-active specific event for the user, and the specified attributes of any currently-  
10 applicable specific event.

1 51. The method according to Claim 41, wherein zero or more attribute values may be  
2 specified for each of the context events and each of the specific events and further comprising the  
3 step of:

4 receiving a request for project management information for a target date and a target time  
5 period; and  
6 wherein the interrogating step interrogates the calendar events created for a plurality of

7 users at the target date and the target time period to provide information about the context events  
8 and specific events scheduled for the users, the specified attributes of currently-applicable context  
9 events, and the specified attributes of any currently-applicable specific events, and further  
10 comprising:

11 generating a response informing a requester of the project management information of the  
12 information for the users using a result of the interrogating step.

1 52. The method according to Claim 41, wherein default attribute values may be specified for  
2 context event types and for specific event types, and wherein a particular context event and/or a  
3 particular specific event may include attribute values which override the default attribute values.

53. The method according to Claim 47, wherein the attribute values include information on  
how to immediately contact the user.

54. The method according to Claim 47, wherein the attribute values include information on an  
alternative contact person for the user.

1 55. The method according to Claim 47, wherein the attribute values include whether, and how  
2 often, the user checks electronic mail messages.

1 56. The method according to Claim 47, wherein the attribute values include whether, and how  
2 often, the user checks voice mail messages.

1       57. The method according to Claim 41, wherein the interrogating step further comprises  
2       interrogating a specific event that is applicable to a target date and a target time or target time  
3       period.